



## Notice

This automatic translation cannot guarantee full intelligibility, completeness and accuracy. [Terms of use](#), [Legal notice](#).

## Description DE20109056

"Tissue, held by load of bulk material, the individual creating the stop options for protecting equipment against falling." The invention relates to a bands or-against horizontal forces acting tissue than any long roll material from rot-resistant synthetic weaves. / RT> The mesh is covered with the bulk of the tissue is matched.

The load from the bulk material and the teeth of the bulk material with the mesh and the soft fabric protector mat or a drainage element as a base to lead a resistance against pulling out. Thus, the invention can be used on raised surfaces located in conjunction with the tissue mounted stop opportunities for personal protective equipment against falls.

When working in the border area increased redevelopment, such Example, during maintenance work on flat roofs, it is necessary and required, to safeguard against falls. Do not those down on the edge of correspondingly high parapets or railings, may be a hedge by attaching portable guard rail or by roping in conjunction with safety harnesses.

For this purpose, stable attachment points are required, where appropriate, the ropes can be attached. Such anchorage devices can be fixedly attached to vertical, horizontal or inclined surfaces, such As an anchor in the masonry or concrete or steel pipe columns, in which the roof support structure anchored and are so high that they exceed the overlying roof strata.

Alternatively, by its own weight held anchorage devices, such As water-filled cushion suitable size rigid or be transportable by individual weights comprised metal constructions, used. Also, networks, by

Bulk loaded with fixed stop attached to the grid options can be used. The currently known methods of construction for permanent use by its own weight holding anchorage devices without penetration of the seal, have a top-side fleece backing to initiate the load in the very coarse mesh structure and are made of stainless steel.

The inventive device comprises a stop roll out of rot-resistant fabric plastic wicker or -Bands, which by interconnectedness processing a very high tensile forces in both directions (tensile stress approximately Can accommodate 50 kN / m). The fabric is rolled out parallel to the edge of a crash also with rolling, soft fiber mats or a drainage element occupied roof area.

Following that, a suitable bulk material is applied so high and the entire area, the tissue that absorb the forces caused by the crash of a person can

The mesh size adapted to the bulk of the soft tissue in combination with fiber mat or a protection element as surface drainage, lead to a sufficiently good teeth, which prevents removal of the tissue structure. The attack on fixed tissue opportunities are taken out of the bulk material.

With the invention, laid flat and built-stop fabric roll out the possibilities of anchorage points required can be very flexible, without selecting a connection with the waterproofing membrane or even a complete penetration of the roof strata package be. The dimension of the tissue can roll out as large elected be that it comes despite the overlap with bulk material is not to high point loads.

The size of the tissue, its mesh size and the strength of the used netting or Bands, the nodes and the actual stop-loops are caused by a case of forces, including the vote necessary safety reserves.

The specific requirements and test procedure consists of a static test with a 100 kg weight and a dynamically applied force of about 10 kN.

With a coverage of about 8 cm of gravel or crushed brick, as it is used as a substrate or Dränagematerial green roofs, is applied with a tissue size of approximately 5 m x 5 m and a mesh size of about 3 cm is sufficient pull out resistance.

At the crossing points are along-or, transverse plates or Bands with a width of approximately 1 cm frictionally connected by weaving together and plastic coating.

The attachment points are welded directly to the fabric, plastic-coated loops formed. The loop material consists of a very stable against tensile fabric (tensile stress approximately 20 kN), as they are also used in safety belts in passenger cars. The loops are then led out of bed later following (load).

The novel tissue roll out in connection with the attack options can serve as an occasional stop device, which means a person then come directly to one of the outstanding points of the bulk material and can then stop at a certain, by the length of the safety cable specified radius around this point move. For extended roof surfaces but can also be many which are located on the tissue Santander eyelets are connected above the bulk material extending through a guide wire together. Thus, the stop device serves as a restraint system.

An embodiment of the invention is illustrated in the figure 1 and 2.

In the drawings: Figure 1 shows the inventive roll out fabric (1) when installed in an isometric view. With (2) identified the rot-fiber protective mat or drainage element, with the tissue before applying the waterproofing membrane (3)-usually full surface-covered. With (4) is marked for the bulk B. greening construction, with which the tissue (1) to cover the entire surface of the edges is away.

With (5) is the real, by bonding surface (6) on tissue mounted attachment point marked by the bulk of (4) passes to lead out the top

~~At these points can stop the safety rope of appropriate personal protective equipment such~~

~~Example by means of a snap hook latched, or a rope connecting multiple attachment points are fixed.~~

Marked with (7) the mesh size of the tissue (1).

Figure 2 shows the formation of tissue structure with a reduced mesh size (8) at the stop point (5). In the range of approximately 50 cm from the point around, a second layer of tissue structure (1) to the existing fabric (1) applied

~~This allows the load at very low grain sizes are transferred to the tissue.~~

~~The load through the bulk material (4) falls in the range of the stop point (5), where vertical tension forces action that can not lie through the net (8) of the tissue, but remain on the mesh (8).~~

With (9) is the hub of the tissue indicated